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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,736	03/18/2004	Kanji Nakamura	1761.1022D	5049

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EXAMINER

SELF, SHELLEY M

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/802,736

Applicant(s)

NAKAMURA ET AL.

Examiner

Shelley Self

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **SUPPLEMENTAL ACTION**

### ***Response to Amendment***

The amendment filed on December 9, 2004 has been considered but is ineffective to overcome the prior art reference and an action on the merits follows. Upon further consideration the indication of allowable subject matter noted in the previous Office Action is withdrawn.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 2 it is not clear how the second piston defines a gap in cooperation with an end of the... mold when the second piston is held in position adjacent (i.e. Examiner understands adjacent to be next too, having a common end point) the cylindrical mold. For example, if there is a gap how can the two be adjacent? Clarification is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claim 1 is rejected under 35 U.S.C.(b) as being anticipated by McEwen (3,980,014) as noted in the previous Office Action.

Claims 2, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by McEwen (3,980,014). McEwen discloses a grinding sludge machine comprising a press unit having a cylindrical mold (20) a first reciprocating piston (40, 42, 44, 46) movably inserted in the cylindrical mold, and a second reciprocating piston (50, 52, 54) arranged in face-to-face relation with the first reciprocating piston (fig. 1), a diameter of an end of the second piston (50, 54) facing an end of the cylindrical mold being larger than an inner diameter of the cylindrical mold. Examiner notes that it is inherent for the second piston diameter to be larger than the inner diameter of the mold so as to close/seal the mold during compression.

With regard to claim 2 as best as can be understood and claim 7, McEwen discloses a gap (22) defining a coolant drain passage, during operation of the machine, the end of the second piston is spaced from the end of the cylindrical mold to define a coolant drain passage (22). Examiner notes that the piston (50, 52, 54) is spaced from an end, as the mold has more than "an" end and such ends have not been positively defined. Therefore the piston (50, 52, 54) is spaced from an end (fig. 1) with a gap (22) drain passage therebetween.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McEwen (3,980,014). McEwen does not disclose the second piston spaced from the end of the cylindrical mold at approximately 0.05 to 1.0 mm. It would have been obvious at the time of the invention to one having ordinary skill in the art to construct McEwen having a gap between 0.05-1.0mm because the discovering the optimum or workable range where general conditions of a claim are disclosed requires only routine skill in the art and does not in itself impart patentability. See *In re Aller*, 105 USPQ 233.

#### ***Response to Arguments***

Applicant's arguments filed December 9, 2004 have been fully considered but they are not persuasive. Applicant's arguments are drawn to the failure of the prior art reference to disclose an apparatus for grinding sludge that results from grinding hardened component parts a cylindrical chamber/mold and a second piston having a diameter larger than the inner diameter of the compression chamber/mold (Remarks, pg. 7). These arguments are not found persuasive, because the prior art reference, McEwen states sludge resulting from tool waste, it is well known in the machining industry to construct tools of hardened steel, therefore the tool waste is that of hardened parts. Further as to the failure of McEwen to disclose a cylindrical mold, this is not found persuasive, because, fig. 1 illustrates the ends of the pistons/gaskets to be circular for closing/sealing the material to be compressed within the chamber, therefore the chamber must too be cylindrical as such piston/gasket configuration would not adequately close/seal the chamber during compression if the chamber were rectangular.

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Additionally regarding the argument that the second piston does not disclose an inner diameter larger than an inner diameter of the compression chamber/mold, this is not found persuasive, because the end of the second piston encompasses gasket (54), i.e. the gasket is part of the end of the piston. Therefore having a diameter of the second piston larger than the inner diameter of the compression chamber. Accordingly, McEwen does disclose the claimed invention and therefore anticipates the invention. The rejection is proper and stands.


### ***Conclusion***

Due to the newly cited rejection(s) above this Office Action is made non-Final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (571) 272-4524. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIE or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf  
March 22, 2005

  
DERRIS H. BANKS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700